

FLIGHT

The
**AIRCRAFT
ENGINEER
&
AIRSHIPS**

First Aeronautical Weekly in the World. Founded January, 1909.

Founder and Editor : STANLEY SPOONER

A Journal devoted to the Interests, Practice, and Progress of Aerial Locomotion and Transport

OFFICIAL ORGAN OF THE ROYAL AERO CLUB OF THE UNITED KINGDOM

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EDITORIAL COMMENT.



The
King's
Cup

ALTHOUGH it would be no difficult matter to criticise the new course for the King's Cup Race, it must, we think, be said that transferring it from Bournemouth to Nottingham is distinctly an improvement. At any rate, the new arrangement does have this in its favour, that it gives to a town that has not hitherto been so favoured, an opportunity of seeing modern aircraft. Moreover, the choice of Nottingham marks an innovation, in that it brings flying to a district with a much wider range of the public. It might be argued that it is among the more affluent classes mainly that one must look for potential purchasers of aircraft. Although this, at the moment, is true enough, it applies to ordinary light 'plane race meetings, rather than to a race such as that for the King's Cup, which is not, and should not be, intended as an advertising "stunt" for private machines, but rather as a means of awakening among the general non-buying public an appreciation of what flying means to the nation. In other words, the King's Cup Race should be regarded as a National event and not as a local one. That being so, one might easily argue that the course for this race should have been so planned that as many cities and towns as possible in Great Britain should be touched by the competing machines, whereas in the actual course chosen the turning points are, generally speaking, at aerodromes, while between turning points the machines in practically no case pass near a large town. Thus it is to be feared that comparatively few people outside the Nottingham district will have an opportunity of seeing the machines.

The obvious solution would appear to be that of making the King's Cup Race a "Round-Britain" flight, and such was, we believe, the original intention when the race was first founded. That there are difficulties in the way may be granted. To begin with, if the King's Cup Race is to be thrown open to machines of all types (and in these "democratic" days presumably this is desirable), the length of the course is

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For Sizes and Prices, see Advert., page xx.

DIARY OF FORTHCOMING EVENTS

Club Secretaries and others desirous of announcing the dates of important fixtures are invited to send particulars for inclusion in this list:—

1927	
July 15	Entries Close for King's Cup Air Race.
July 16	Birmingham Air Pageant, and Air League Challenge Cup, Castle Bromwich.
July 30	King's Cup Air Race, Hucknall, Nottingham.
Aug. 1	Grosvenor Challenge Cup, Hucknall, Nottingham.
Aug. 10-12	Navy v. R.A.F. Cricket Match.
Aug. 20-	
Sept. 2	International Aero Exhibition, Copenhagen.
Sept. 10	Gordon-Bennett Balloon Race, Denver, U.S.A.
Sept. 25	Schneider Trophy Race at Venice.
Oct. 20	Aero Golfing Soc. (Cellon Cup), Walton Heath.

limited to the greatest distance which the slowest machine entered can cover in the time available. One may easily prove that this may lead to absurdities, by supposing, for example, that somebody entered a "Wren" monoplane with a cruising speed of 45 m.p.h. Assume head winds, etc., to reduce this to an average of 35 m.p.h., and grant that the machine can put in 10 hours' flying in a day. Then, if the race is to be confined to one day, the course must obviously be limited to 350 miles. That no such machine is likely to be entered does not greatly affect the argument. Fairly slow machines will doubtless be entered, and the above limitations consequently have to be taken into account.

Quite apart from this consideration of speed, a race around Britain is a costly affair to organise, and it may be taken for granted that it is this question of cost which has prevented the Royal Aero Club from planning this year's King's Cup Race on more ambitious lines. Thus, while the arrangements for increasing "air-mindedness" with this year's race are not all that might be desired, they probably represent fairly well all that is practically possible.

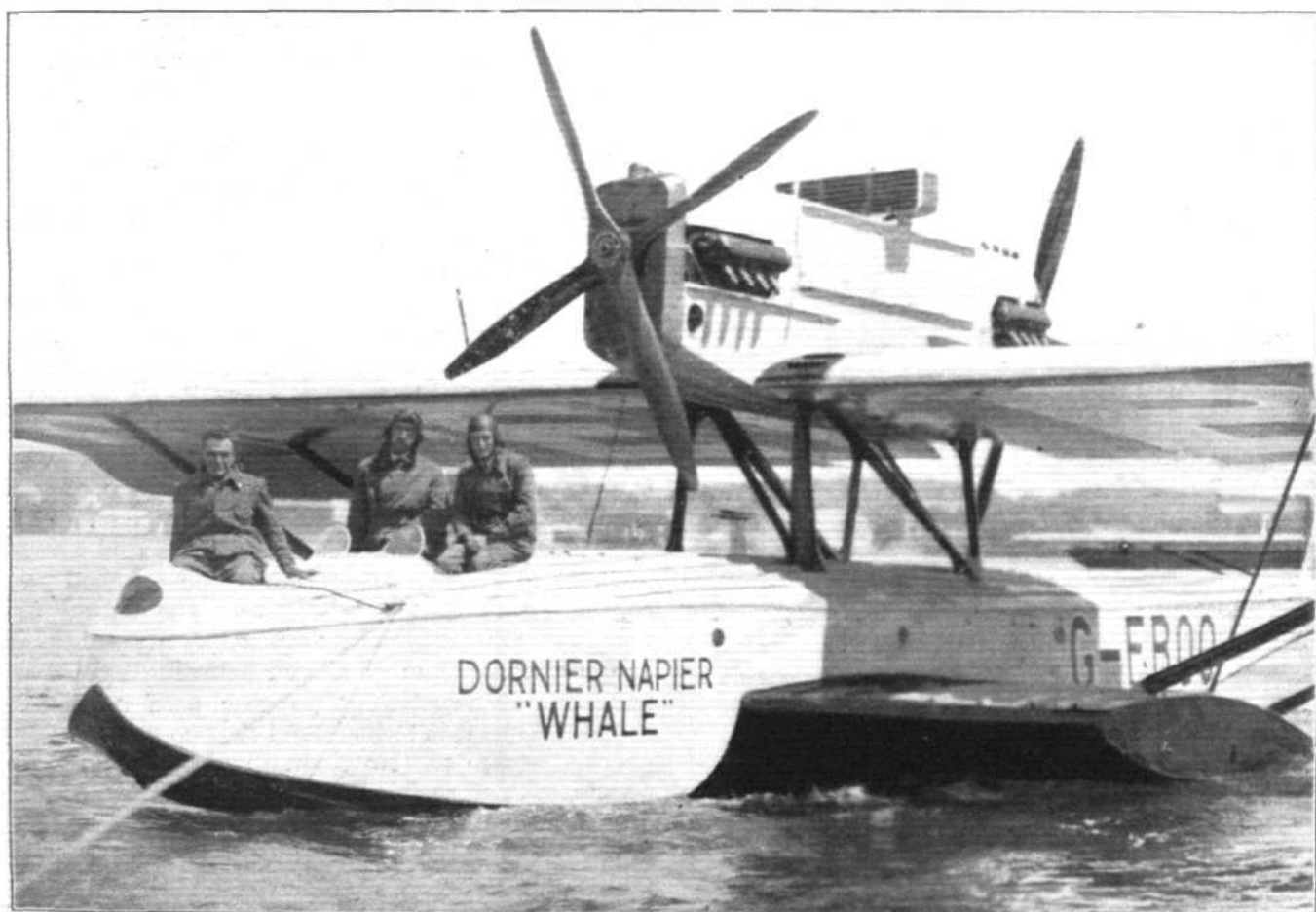
♦ ♦ ♦

The Copenhagen Aero Show

It is greatly to be regretted that the Treasury should have seen fit to decline the request of the Air Ministry for what was really a very modest grant towards defraying the expenses of a really representative British exhibit at the forthcoming international aero exhibition at Copenhagen. The Gothenburg aero show was a great success for British aviation. On that occasion a small grant was made, and the result was that Britain was worthily represented. This year at Copenhagen we

might easily have done even better, for British aircraft and aero engines have made enormous strides since 1923. But the parsimonious shortsightedness of the Treasury has effectively put a stop to concerted action by the S.B.A.C.

It may be argued that but little business is to be done at a show like that at Copenhagen. With that we do not agree. It is true that the Scandinavian countries are relatively small, that their rate of exchange is now back to normal, and that they cannot afford to spend a great deal on the purchase of foreign aircraft. While this is not to be denied, it should be remembered that Denmark alone, the smallest of the three, has already purchased British aircraft representing a not inconsiderable sum. Moreover, Copenhagen has been called the "Paris of the North," and just as the Paris aero show attracts representatives from all over the world, so a Copenhagen aero show may confidently be expected to be visited not only by representatives from the other two Scandinavian countries, but also from Finland (where England is just beginning to secure orders), and the Baltic States. There was a time when Britain was practically debarred from selling aircraft abroad, owing to unfavourable rates of exchange and the consequent high cost of British aircraft. We are sure, however, that nowadays there is a growing realisation that although British machines and engines may be somewhat more expensive in first cost, their strong, solid construction and hard wearing qualities more than make up for this, so that they are in reality far less expensive than the first cost might indicate. That being so, we cannot but regret that the British aircraft industry will not be as extensively represented as should have been the case.



THE ENGLAND-AMERICA-ENGLAND FLIGHT: This photograph shows the Dornier Wal on which Capt. Frank Courtney, Flight-Lieut. Downer and Mr. Little are to attempt the double crossing of the Atlantic. The engines are Napier "Lions."



ATLANTIC FLYERS ARRIVE AT CROYDON: The photograph in the top left-hand corner shows the Bellanca monoplane crossing the aerodrome at low altitude, while in the bottom right-hand corner it is seen at the moment of alighting. Above, Mr. Chamberlin is seen descending from the machine, and below, on the left, the famous pilot is introducing Mr. Levine to his mother.

CHAMBERLIN VISITS LONDON

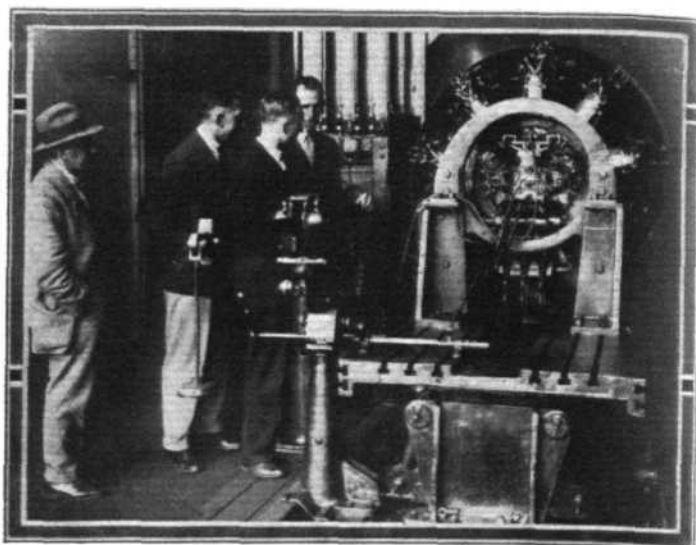
MR. CLARENCE CHAMBERLIN, who with Mr. Levine recently flew from New York to Cottbus, near Berlin, flew to Croydon from Le Bourget on July 8 for a short visit to this country. He left Le Bourget at 12.30 p.m. in the Bellanca monoplane "Columbia," accompanied by Mr. Levine, M. Drouhin, the well-known French pilot, and an interpreter.

Escorting the Atlantic monoplane were two of the Imperial Airways air liners, one of which carried Mrs. Chamberlin, the American airman's wife. They reached Croydon shortly after 3 p.m., and on landing, Mr. Chamberlin was greeted by his mother, who has been staying with her sister at Wembley. Mrs. Chamberlin had not seen her son for over seven years, so the greeting was naturally an enthusiastic one.

There were not very many present at Croydon to welcome the two airmen—quite a contrast to Col. Lindbergh's arrival—who were officially received by representatives of the American Embassy, Mr. S. L. Bertram, on behalf of the Air Ministry, and Mr. B. Stevenson, representing the Royal Aero Club. Shortly after their arrival, Mr. Chamberlin proceeded to Wembley with his wife and mother, whilst Mr. Levine flew back to Le Bourget in the "Columbia," which was piloted by M. Drouhin.

Mr. Chamberlin is not flying back to America, but is returning—in company, we understand, with Commander Byrd and their parties—via the "Leviathan," which sailed from Southampton on Tuesday. On the other hand, Mr. Levine intends to attempt a return flight in the "Columbia," and for this purpose has engaged M. Drouhin to act as pilot. M. Drouhin, it may be mentioned, was originally preparing to make the attempt in a Farman machine.

Mr. Levine hopes to make a start as soon as the necessary overhauls, etc., to the "Columbia" have been made, and in



Mr. Chamberlin inspects the "Jupiter" at Bristol.

the meanwhile he is spending a few days in England with Sir Alan and Lady Cobham—having flown over from Paris on Saturday in one of the Imperial Airways machines. As Mr. Levine cannot speak French, and M. Drouhin cannot speak "American," they will be accompanied on their journey by a pocket dictionary, by means of which they hope to converse!



THE WRIGHT-BELLANCA MONOPLANE AT CROYDON: The upper photograph shows the general appearance of the New York-Cottbus monoplane, while in the lower may be seen in more detail the Wright "Whirlwind" engine, the pilot's cockpit and wind screen, and a corner of the large petrol tank.

The Royal Aero Club of the United Kingdom

OFFICIAL NOTICES TO MEMBERS

KING'S CUP AIR RACE

IN view of several questions raised on the Formula, the Royal Aero Club make the following statement:—

The h.p. used in the formula shall be the h.p. at maximum r.p.m. of the type-tested engine and not of the particular engine entered.

Modifications may only be made to the engine entered making it different from the type-tested engine provided such modifications do not invalidate the Air-worthiness

Certificate, and have received prior approval of the Air Ministry.

All placed machines in the race will be examined under Rule (5) to see that the aeroplane and engine comply with the Regulations.

Offices: THE ROYAL AERO CLUB,
3, CLIFFORD STREET, LONDON, W. 1.

H. E. PERRIN, Secretary.

NOTTINGHAM FLYING MEETING

Hucknall Torkard near Nottingham

SATURDAY, JULY 30, 1927

Air Race for the King's Cup

- 1st Prize: Cup presented by His Majesty the King and £200.
2nd Prize: £100.
3rd Prize: £50.

SUNDAY, JULY 31, AND MONDAY, AUGUST 1, 1927

1. Grosvenor Challenge Cup and Stakes, £100

(The Grosvenor Challenge Cup presented by Lord Edward Grosvenor.)

Open to any type of aeroplane fitted with an engine weighing not less than 185 lb. or more than 285 lb. The aeroplane and engine must have been entirely constructed in the British Empire, and the entrant and pilot must be British subjects. The entrant must be an individual and not a company.

Course approximately 15 miles. Handicap race.

First Prize: The Grosvenor Challenge Cup and £60.
Second Prize: £25. Third Prize: £15, if six or more starters.

2. High-Power Handicap—Stakes £150

Open to any type of aeroplane with engine developing not less than 200 h.p. at maximum permissible r.p.m.

Open to all pilots.

Course approximately 30 miles.

First Prize: £100. Second Prize: £30. Third Prize: £20, if six or more starters.

3. Low-Power Handicap—Stakes £75

Open to any type of aeroplane the total piston displacement of the engine of which does not exceed 1,500 c.c.

Open to all pilots.

Course approximately 10 miles.

First prize, £40. Second prize, £25. Third prize, £10 if four or more starters.

4. Ladies' Purse, £35.

Open to any type of aeroplane.

Open to lady pilots only.

Course approximately 10 miles.

First prize, £20. Second prize, £10. Third prize, £5, if four or more starters.

5. Society of British Aircraft Constructors' Challenge Cup and Stakes, £75.

Open to all clubs associated with the Royal Aero Club. Each club may enter one aeroplane, which must be the *bona fide* property of, and registered in the name of, the club entering. The pilot must be a member of the club entering. The total weight of the aeroplane when empty must not exceed 400 kilos. (Note:—Weight empty signifies total weight in flying order, but does not include fuel and pilot.)

Handicap race over a course of approximately 15 miles.

First prize: The Society of British Aircraft Constructors' Challenge Cup and £50. Second prize, £25.

6. Private Owners' Handicap—Stakes £100.

Open to any type of aeroplane privately owned by and registered in the name of an individual. The definition of "privately owned" is at the sole discretion of the Royal Aero Club, who reserve the right to refuse any entries.

Open to all pilots not necessarily the owners of the aeroplanes.

Course approximately 10 miles.

First prize, £60. Second prize, £25. Third prize, £15, if six or more starters.

The programme of events for each day will be fixed after close of entries.

Entries close noon, Thursday, July 21, 1927. Entry fee for each event, 10s. (For King's Cup see separate regulations.)

Full particulars and entry forms can be obtained from the Royal Aero Club, 3, Clifford Street, London, W.1.

Any of the races may be flown in heats according to the number of entries received.

Where races are flown in heats the winners of heats not placed in the final will receive prizes of not less than £10 each.



The Royal Air Force Memorial Fund

THE usual meeting of the Grants Sub-Committee of the Fund was held at Iddesleigh House, on June 30. Lieut.-Comdr. H. E. Perrin was in the Chair, and the other Members of the Committee present were:—Mrs. L. M. K. Pratt-Barlow, O.B.E.; Squadron-Leader Douglas Iron, O.B.E. The Committee considered in all 13 cases, and made grants to the amount of £128 8s. The next Meeting was fixed for to-day.

The Second London-India Attempt

THE Air Ministry makes the following announcement in connection with the forced landing of the R.A.F. Hawker Horsley at Martlesham Heath aerodrome on June 18:—

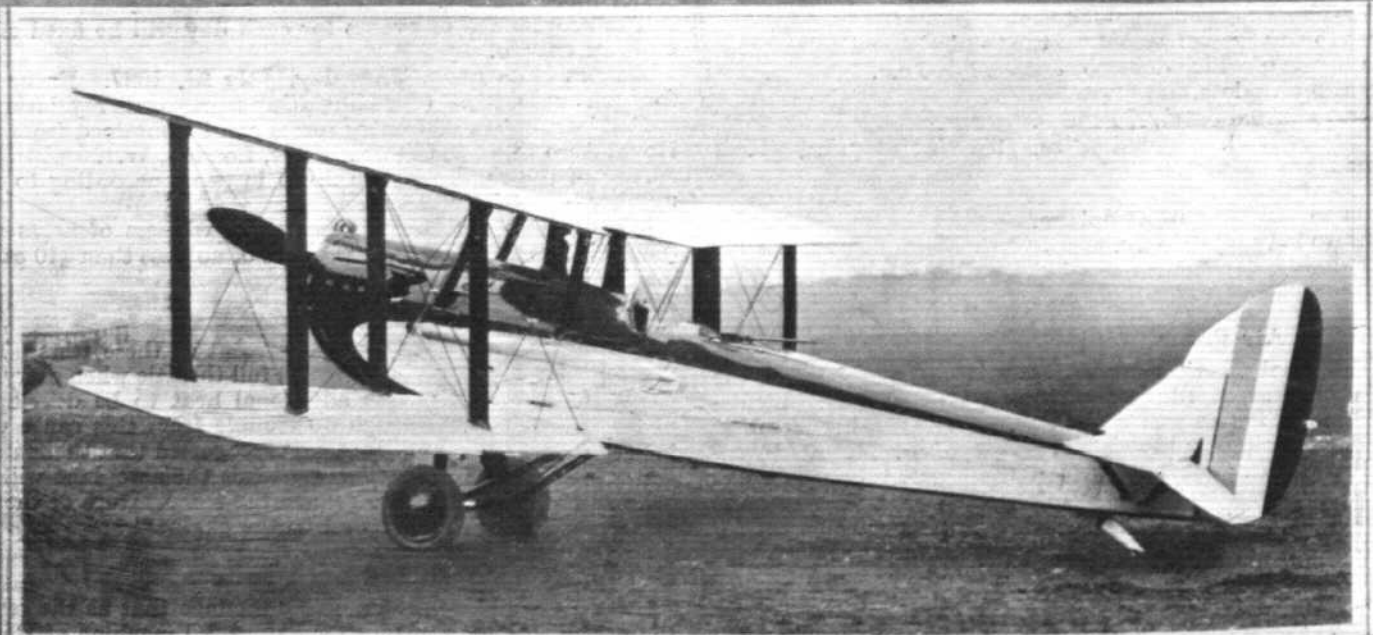
"Thirty minutes after starting from Cranwell the oil temperature rose to an excessive height while the oil pressure dropped very greatly. This rendered it necessary for the machine to land. The engine was taken out and thoroughly examined and tested at Rolls-Royce works as soon as possible after the flight and was found to be running perfectly. An

Air Ministry representative was present at these tests. The necessity for running the engine at full throttle when carrying so big an overload causes additional heat to be developed in an engine, and, although no trouble from this cause was experienced on the first flight, it is recognised that the margin is a small one and in any further trials the aeroplane will be fitted with an oil cooler to reduce the temperature of the oil in the tank which supplies oil to the engine."

R.A.F. Flying Accidents

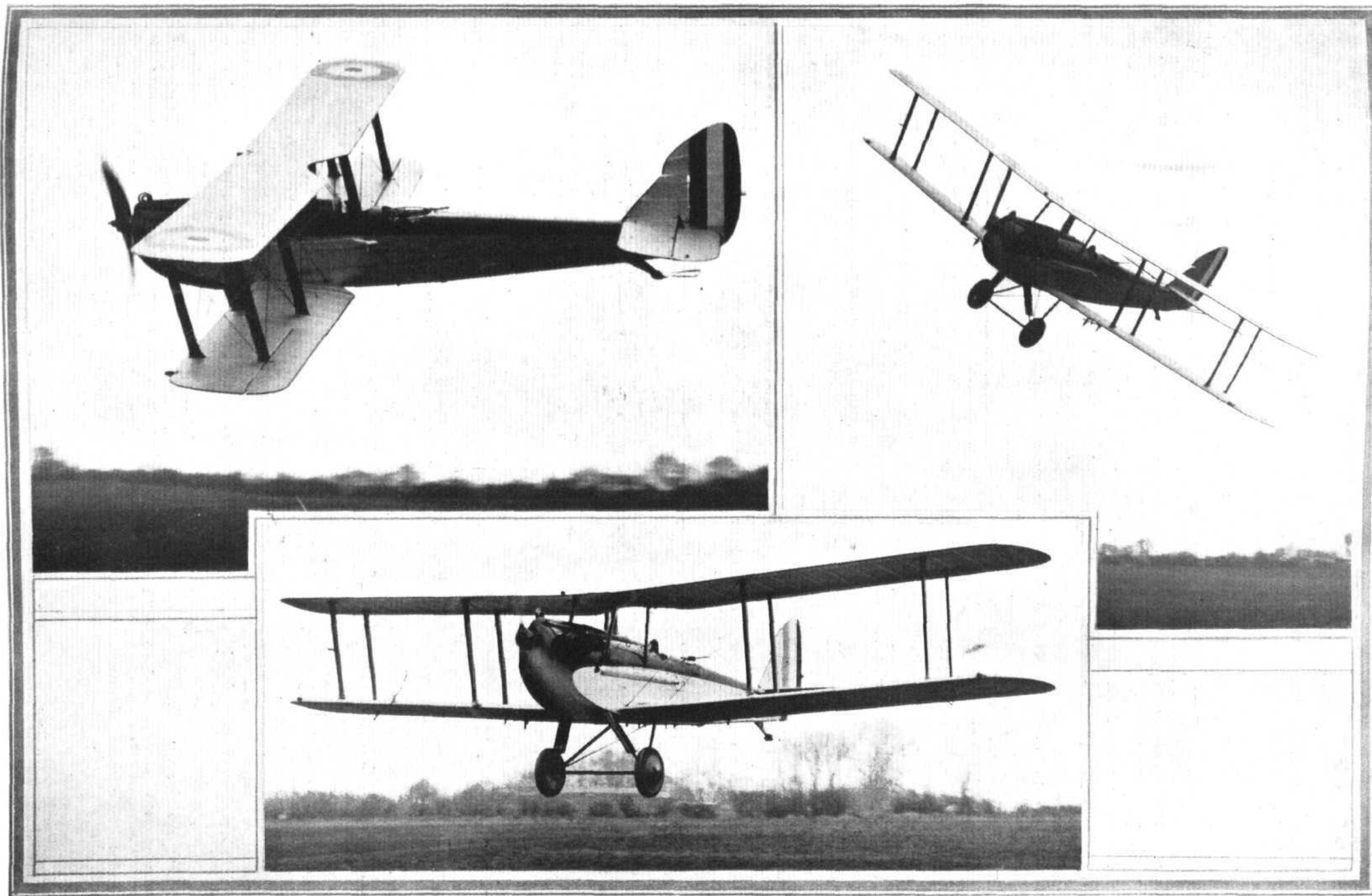
THE Air Ministry regrets to announce that as the result of an accident at Dundee to a Fairey 3D machine of Royal Air Force Training Base, Leuchars, on June 22, Rawdon Frank Gerald Salmond, Lieut., Royal Navy, Flying Officer, Royal Air Force, the pilot and sole occupant of the aircraft, was injured and died after admission to hospital.

As a result of an accident at Old Chaman, India, to a Bristol Fighter machine of No. 31 Squadron, on June 24, 1927, Flying Officer Randal Earl Slacke, the pilot and 349473, L.A.C. Alfred Claudius Hart, were killed.



THE DE HAVILLAND "HOUND": This machine has been said to be "too good" for a General Purpose type, and may be transferred to a different class. Performance figures may not be given, but the "Hound" is believed to have excellent speed, climb and ceiling. The engine is a Napier "Lion."

["FLIGHT" Photographs]



THE DE HAVILLAND "HOUND" IN ACTION: Three photographs of a new D.H. with Napier "Lion." When the photographs were taken the machine was piloted by Capt. Hubert Broad.

["FLIGHT" Photographs]

THE BIRMINGHAM AIR PAGEANT

WE give below, briefly, the Programme of Events for the Birmingham Air Pageant, which is being held at Castle Bromwich Aerodrome on Saturday, July 16.

Note.—The Competitive Events in the Pageant will be conducted by the Midland Aero Club, Ltd., under licence from, and under the Competition Rules of, the Royal Aero Club.

Event No. 1 (11 a.m.).—Short Circuit Races

Over a course of 12½ miles. Prizes presented by the Birmingham Air Pageant.

Event No. 2 (12.30 p.m.).—Low Power Handicap

Open to any type of aeroplane the total piston displacement of the power plant of which does not exceed 5,000 c.c. First Prize, £50. Second Prize, £25. Third Prize, £10, if five or more starters.

Event No. 3 (1.30 p.m.).—High Power Handicap.

Open to any type of aeroplane the total piston displacement of the power plant of which exceeds 5,000 c.c. First Prize, £50. Second Prize, £25. Third Prize, £10, if six or more starters.

Event No. 4 (2.30 p.m.).—Race for the Air League Challenge Cup

(Under Competition Rules of the Royal Aero Club).

Open to all Clubs associated with the Royal Aero Club, and to aircraft the total weight of which when empty must not exceed 400 kilos.

Over a course of 198 miles, starting and finishing at Castle Bromwich Aerodrome:—

Castle Bromwich to Sherburn-in-Elmet	91 miles.
Sherburn-in-Elmet to Woodford	.. 49 ..
Woodford to Castle Bromwich	.. 58 ..
	198 ..

At Sherburn-in-Elmet and Woodford Aerodromes each competitor must alight and make a stay of 30 minutes.

As the above course necessitates flying over the Pennines and as the race is open only to low-power machines, in the event of bad weather prevailing a short course will be substituted; from Castle Bromwich to Woodford and return to Castle Bromwich, with a compulsory stop of one hour at Woodford. This course is approximately 116 miles.

The aircraft will be handicapped on a time allowance basis, arranged by the Official Handicappers of the Royal Aero Club. The handicap will be proportionately divided over the sections of the course, so that the first machine in at either of the Aerodromes will be the winner of the completed portion of the circuit; and the first in at Castle Bromwich will be the winner of the race.

First Prize, £50, presented by Sir Charles Wakefield. Second Prize, £35. Third Prize, £15 presented by the Birmingham Air Pageant. Also, A Silver Cup presented by the *Manchester Evening News*, and £50, presented by the *Manchester Guardian* for the first machine to arrive at Woodford Aerodrome.

Events Nos. 5-9 (3 to 4.20 p.m.).—R.A.F. Display.

Event No. 10 (4.20 to 4.40 p.m.).—Set Piece.

Event No. 11 (4.40 to 4.50 p.m.).—Departure of Service Aircraft.

After Event No. 10 all aeroplanes will take off in succession to fly back to their own aerodromes. No. 25 (Fighter) Squadron and No. 41 (Fighter) Squadron will fly off in formation.

Event No. 12 (5.15 to 5.30 p.m.).—Crazy Flying

A Demonstration of the liberties which can be taken with a lightly loaded training machine by a skilled pilot. Pilot:—Capt. Macdonough (Chief Instructor of the Midland Aero Club).

Event No. 13 (5.45 p.m.).—Finish of Air League Cup Race

The first machines in the Air League Cup Race are expected back about 5.45 p.m. The Lord Mayor will subsequently present the Prizes won in all three races.

Note.—In the event of the alternative Short Course being flown the first machines may be expected back about 5.15 p.m.

Event No. 14 (6.15 to 7.15 p.m.).—Aerobatics

By Auxiliary Officers of the 605 (County of Warwick) Squadron of the R.A.F. Pilots:—Squadron-Leader J. A. Cecil Wright, Flying Officer J. M. Leach, Pilot Officer C. L. Knox, V.C., Pilot Officer J. C. Brinton, Pilot Officer G. V. Perry.

During the evening, until 9 p.m., there will be pleasure flights in the "City of Melbourne" and smaller planes, and these will be continued on Sunday, July 17, from 10 a.m. to 6 p.m.

It may be of interest to note that the Air League of the British Empire has chartered the triple-engined air liner "Argosy" from Imperial Airways, and will take part in the Birmingham Air Pageant. The "Argosy" will carry eighteen passengers, including Air Vice-Marshal Sir Wm. Sefton Brancker, K.C.B., A.F.C., Director of Civil Aviation, Brigadier General P. R. C. Groves, C.B., C.M.G., D.S.O., Secretary General of the Air League, The Hon. Elsie Mackay, and Editors of the leading London newspapers.

A FLYING FÊTE

QUITE an innovation in social affairs will be the flying fete and house party to be given by the Marchioness Townshend during the week-end of July 23 at her country place, Raynham Park, Fakenham, Norfolk. Among those who are expected to arrive by air, landing on the lawn, are Lady Bailey, Lord Ossulston and Col. the Master of Sempill, Capt. H. Broad, Mr. Bert Hinkler, and other well-known pilots.

In connection with this first Aerial Fete, the proceeds of which are in aid of Norwich Hospitals and the Norfolk and Norwich Aero Club, the following lively programme has been arranged, commencing at 3 p.m.:—

Thrilling "stunts" by well-known pilots and aeroplane competitions for Cup presented by the Marquis Townshend, and other valuable prizes.

Upside-down flying and looping.

Balloon bursting competition by aeroplanes in flight.

Free flights for lucky programme and ticket holders. Passenger flights can be booked during the afternoon.

Exciting toy balloon race for children: valuable prize for the winning balloon.

Writing on the sky (weather permitting), aerial fireworks released from aircraft, etc.

There will also be a "Daily Mail" Push Ball Match, and the fete will be visited by "George," the well-known comedian.

Finally, there will be a parachute descent from an aeroplane in flight by Major Sandbags.

The prices for admission will be 2s. 6d. and 1s.; children, 3d. Large car park, 2s. 6d. Teas and refreshments at popular prices.

Tickets are obtainable from Mr. H. O. Bennett, 5, Opie Street, Norwich, or from the Fete Secretary, Raynham Hall, Fakenham.

Raynham Park is 3½ miles from Fakenham, 12 miles from Dereham, 17 miles from Kings Lynn, and 26 miles from Norwich. Railway station: Raynham Park.

The Hill "Pterodactyl"

CONCERNING the reference to the Hill "Pterodactyl" in the article on the Guggenheim Competition by "Marco Polo" in the last issue of THE AIRCRAFT ENGINEER, we have received from Capt. Hill a correction in connection with "Marco Polo's" reference to the curves and table in the Royal Aeronautical Society's Journal. In his article "Marco Polo" surmised that the curves referred to the complete model of the "Pterodactyl" and the table to the wing only. The actual facts communicated to us by

Capt. Hill are that the curve, Fig. 5 on p. 526 of the Journal, gives the results of wind-channel tests on complete model. The table on p. 540 gives the results of a test on an early wing designed by Mr. Handley Page, and referred to in his contribution to the discussion of Capt. Hill's paper. The confusion has apparently arisen owing to the absence of any title to the table.

Pulham Airship Shed for Cardington

THE airship shed at Pulham is being dismantled, and will be re-erected at Cardington.

THE COPENHAGEN AERO SHOW

August 20—September 2, 1927

A FEW weeks ago we were able to announce briefly in *FLIGHT* the fact that it had been decided to hold an international aero exhibition in Copenhagen during August and September of this year. Some further particulars are now available, and as it appears likely that several British firms will be exhibiting, it is thought that a few notes on this show may be of interest.

The International Aircraft Exhibition at Copenhagen, Denmark, will be held in the Forum, a new large exhibition hall situated practically in the centre of Copenhagen. The Forum is a structure oval in plan form, measuring 90 m. (295 ft.) in length and about 50 m. (165 ft.) in width. One great advantage of an aero show at Copenhagen is that the civil aerodrome of Copenhagen (Kastrup) on the Island of

Albert V. Jørgensen, Barrister of the Supreme Court, and Lieut. Pauli Krause-Jensen, Secretary.

The Copenhagen Aero Show will include the usual range of aeronautical articles from complete machines and engines to boats, boat motors, &c., navigational equipment, instruments, machinery and tools, manufactured aircraft parts, photographs and tableaux, maps and charts, books, inventions, and aviation clothing, etc. The stand charges for aircraft are 20 Danish Kroner (about 18s. 6d.) per sq. m. up to 200 sq. m., 18 Kr. up to 300 sq. m., and 16 Kr. above 300 sq. m. For aero engines the charges are somewhat higher, *i.e.*, from 30 Kr. per sq. m. down to 27 Kr.

We understand that a representative of the exhibition is at present in this country with a view to securing British



Entering Denmark by Air: This photograph, taken by a Danish Army pilot, shows a new "land mark," erected by private means recently, at the harbour of Rødby Havn on the Danish island Lolland. It is at this point that commercial aeroplanes from Germany enter Danish territory, and doubtless many readers of "Flight" will see it on their way to the forthcoming Aero. Show at Copenhagen.

Amager, is only 10 minutes from the Forum by car, so that exhibitors who so desire may readily have a machine flying there daily during the exhibition, thus demonstrating the machine in actual flight as well as showing it at the exhibition.

The Exhibition Committee has requested H.R.H. the Crown Prince of Denmark to become the Patron of the Exhibition, a request which was readily granted as the Crown Prince takes a very keen interest in flying. The Committee includes the directors of the leading Danish commercial associations, and the Honorary Presidents are: The Minister of Defence, the Minister of Traffic, the Minister of Commerce and the Prefect of Copenhagen. The members of the Executive Committee are: Tyge Rothe, former Minister of Commerce, President. August Gihm, General Commissary.

exhibits. It had been hoped that concerted action might be taken by the S.B.A.C., but failure of the Air Ministry to secure Treasury sanction for a small grant was responsible for the abandoning of this idea. There is, however, a good prospect of several British firms exhibiting, although at the moment no official statement as to the identity of the firms can be published.

Copenhagen is becoming an important aviation centre in Northern Europe, and doubtless visitors from all the Scandinavian countries, the Baltic states, Germany, France, Holland and Belgium, will make a point of visiting the Forum during the exhibition. As many of the nations surrounding the Baltic are potential purchasers of aircraft, it is somewhat regrettable that it has not been found possible for the S.B.A.C. to arrange a combined exhibit.

The Gloster "Gamecock II"

OUR attention has been called to an error in our description of the Gloster "Gamecock II" for Finland in the issue of *FLIGHT* for June 2, 1927, in which the weight of petrol (52 gallons) was given as 595 lbs. This should have been 395 lbs., which would have made the weight of power unit 1,370 lbs. instead of 1,570 lbs., and the total loaded weight 2,854 lbs. The consequent reduction in power loading and wing loading would bring these figures to 6.8 lb./h.p. and 10.85 lb./sq. ft. respectively. Will readers please note.

A Lufthansa Report

A REPORT just issued on the first year's working of the Lufthansa since it was formed by the amalgamation of Junkers and Aero-Lloyd, shows a gross turnover of £345,000, as against current overhead costs of only £62,500. With the exception of £400, the whole of the profit, £283,000, has been devoted to writing off the relatively high book value of the machines and motors, as a measure of precaution against rapid technical developments. The number of machines owned by the company rose from 100 to 120 during the year, and the personnel from 934 to 1,527.

PRIVATE



FLYING

A Section of **FLIGHT** in the Interests of the Private Owner, Owner-Pilot, and Club Member

CLUB PROGRESS IN AUSTRALIA

THE Light Aeroplane Club at Sydney, Australia, has made remarkable progress during the last year. It commenced with only two machines which shared a solitary hangar with two or three antique machines, privately owned. Today the fleet has increased to three, all "Moths," besides two other "Moths," owned by members, all of which are housed in the club's hangar at Mascot, just outside Sydney, which is large enough to accommodate six machines. A workshop, stores and office are attached, whilst nearby is an up-to-date club-house with tennis courts. A main hangar on the aerodrome is packed with owners' machines. Two special petrol pumps have been installed, taking the place of an old iron tank where tins were stored, and saving the club the laborious task of filling up machines from tins. Further plans are still developing. By now they will have probably received their new Mark II "Moth" from England, purchased out of club funds. When Major de Havilland recently visited the club in his Mark II "Moth" some of the members availed themselves of the opportunity of trying it and were very pleased with the increased performance of the new model. Any further acquisition to the fleet after the latest machine arrives will bring the club a housing problem. It is the common difficulty facing private flying in the country now, together with that of the expense of obtaining skilled maintenance for machines. These important questions are already being tackled by the club, whose committee has asked the Civil Aviation Department to erect another large hangar suitable for use as a service station.

The club itself has offered to organise a cheap and efficient service system which will enable the private owner to obtain garage washing for his machine and ordinary maintenance at a moderate weekly charge. There is also urged the erection of a compass-swinging base and the establishment of an air route and weather report bureau of information at the aerodrome, as well as other improvements for the "air port of Sydney."

Keen Local Interest in Flying

The club inaugurated a week-end joy riding scheme, charging 5s. for a very short flight. It was spurred to do this by the idea that there existed a large public demand for a brief cheap flight, and the immediate response completely justified the idea. From the beginning crowds have regularly flocked to the aerodrome, and it has become necessary to issue a limited number of tickets for Saturdays and Sundays. At the

first week-end 187 people were taken up in the two "Moths" available. Hundreds have to be disappointed, proving that the public will fly given a fair opportunity. It has now become necessary in the interest of the members to allot only one machine for this work.

A Few Items

The insurance question in relation to flying has proved a burden to the insured pilot, but the recent decision of one company has lightened it considerably. Licensed pilots are now accepted for any policy without any "loading" whatever on account of their flying, though they are still subject to the particular medical examination. The daily business of the club has grown to such proportions that it has become necessary to appoint a permanent secretary. During the recent visit of the Duke and Duchess of York in the *Renown*, the flying instructor, Capt. E. W. Leggatt, flying Major de Havilland's "Moth," led a "formation" of two club "Moths" piloted by Mr. R. M. King and Mr. H. W. Ross, forming part of the air fleet of twenty-four machines which paid an aerial homage on the occasion.

The chief engineer, Mr. Mitchell, passed his flying tests despite an injury to his hand which he received in a painful accident when swinging a propeller.

It is the rule at Mascot for flying to cease half-an-hour before sunset that the staff may have the advantage of daylight in which to prepare the machines for the next day's flying.

Spreading Influence of Flying

Since the Sydney Club commenced to give passenger flights the admirable example has been followed by two pilots acting in company, who acquired Major de Havilland's "Moth." They have given it a special gold finish and have appropriately christened it "The Golden Moth." Their charges are 5s. for a short flight, such as the club gives; 10s. for a flight at about 1,000 ft.; £1 for a flight over Sydney and the harbour; and 1s. 9d. per mile by quotation, for air-taxi work.

The Australian newspaper, the *Sun*, has purchased a "Moth" for business purposes, and is the only newspaper in the State to have done so. The *Brisbane Courier*, however, has used a machine for some time to expedite delivery of their newspapers in outlying parts, organising this service themselves.

FLYING BETWEEN SERMONS: By using an Avro aeroplane the Bishop of Willochra, S. Australia, who attended the Anglo-Catholic Conference in London, was able to preach in London on Sunday morning last, and in Manchester in the afternoon. Our photograph shows the Bishop at Woodford after landing. His pilot was Mr. Goodfellow, of the Lancashire Aero Club. The machine left London at 1 p.m. and landed at Manchester at 2.30 p.m.





TO 18,000 FT.: The Honourable Lady Bailey (right), accompanied by Mrs. Geoffrey de Havilland, last week succeeded in establishing a new world's record for light 'planes by ascending to 18,000 ft. in a De Havilland "Moth X."

LIGHT 'PLANE CLUBS

London Aeroplane Club, Stag Lane, Edgware. Sec., H. E. Perrin, 3, Clifford Street, London, W.1.
Bristol and Wessex Aeroplane Club, Yate, Gloucester. Sec., C. S. Clarke, Channel Road, Walton Park, Clevedon, Somerset.
Hampshire Aeroplane Club, Hamble, Southampton. Sec., Maj. Ross White, Hamble, Southampton.
Lancashire Aero Club, Woodford, Lancs. Sec., C. J. Wood, Oakfield, Dukinfield, near Manchester.
Midland Aero Club, Castle Bromwich, Birmingham. Sec., Maj. Gilbert Dennison, 22, Villa Road, Handsworth, Birmingham.

Newcastle-upon-Tyne Aero Club, Cramlington, Northumberland. Sec., A. H. Bell, c/o The Club.
Norfolk and Norwich Aero Club, Mousehold, Norwich. Sec., H. O. Bennett, 5, Opie Street, Norwich.
The Scottish Aero Club Movement, 101, St. Vincent Street, Glasgow. Sec., Harry W. Smith.
Suffolk Aeroplane Club, Ipswich.—Secretary, Courtney N. Prentice, "Hazeldell," Stowmarket, Suffolk.
Yorkshire Aeroplane Club, Sherburn-in-Elmet, Yorks. Sec., J. F. Barnes, 39, Swan Arcade, Bradford.

LONDON AEROPLANE CLUB

THE total flying time for the week ending 9th inst. was 52 hrs. 45 mins.
 Pilot instructors:—Capt. F. G. M. Sparks, Capt. S. L. F. St. Barbe.
 Dual instruction:—H. M. Samuelson, J. R. De Havilland, Miss Wilson, A. Southgate, H. W. Marlow, J. G. Crammond, P. Hall, R. G. Whalley, R. Maurice, R. Sanders Clark, Miss Spooner, G. H. Craig, A. C. M. Jackaman, W. L. M. O'Connor, L. W. Dent, L. D. Daniels, A. S. Richardson, A. G. How, H. R. Presland, E. L. Clarke, W. T. Ballantyne, G. Black, Miss Fletcher, E. K. Blyth, I. E. Nott, J. E. Furlong, A. B. Ferguson, R. Drysdale Smith.
 Solo flying:—J. G. Crammond, W. Roche Kelly, R. M. S. Veal, W. Hay, Miss Spooner, A. F. Wallace, R. Sanders Clark, O. J. Tapper, Miss O'Brien, W. T. W. Ballantyne, E. K. Blyth, D. H. P. Esler.
 Passenger flights:—Miss Salisbury, C. Clapham.
 Aviators' certificates:—A. C. M. Jackaman passed the tests for his aviator's certificate on Friday, 8th inst. The tests were carried out on a D.H. "Moth" recently purchased by him.
 Air League Challenge Cup:—The club will be represented by one D.H. "Moth" and the Bristol "Brownie" in the race for the Air League Challenge Cup, on Saturday next at Castle Bromwich, Birmingham. The committee have selected the following pilots: W. Hay (D.H. "Moth") and L. J. C. Mitchell (Bristol "Brownie").
 Presentation to Miss O'Brien:—To commemorate her victory in the first "Aerial Oaks," Miss O'Brien has been presented with a gold wristlet watch by the London Aeroplane Club.

LANCASHIRE AERO CLUB

REPORT for week ending July 9.—Total flying time, 29 hrs. 30 mins., made up as follows:—
 Dual with Mr. Brown:—Messrs. Harber, 1 hr. 55 min.; Anderson, 1 hr. 35 min.; Allott, 1 hr. 15 min.; Caldecott, 1 hr. 5 min.; Hartley and Kinsley, 40 min. each; Parker, 35 min.; Musgrave and Watson, 30 min. each; Pattricoux, Meades and Linaker, 25 min. each; Gerrard, Tweedale,

Hope and Miss Baerlein, 20 min. each; Scholfield, 15 min.; Riley, Torres, Crosthwaite and Ruddy, 10 min. each.

Dual with Mr. Cantrill:—Messrs. Anderson, 30 min.; Torres, 25 min.; Rowley, Tweedale and Stonex, 20 min. each; Ruddy and Scholfield, 15 min. each.

Dual with Mr. Scholes:—Messrs. Harber and Caldecott, 25 min. each. Solo:—Messrs. Costa, 1 hr. 10 min.; Twemlow, 1 hr.; Lacayo, 35 min.; Gattrell and Goodfellow, 25 min. each; Crosthwaite, 30 min.; Hardy, Michelson and Williams, 15 min. each; Chapman, 10 min.; Leeming, 45 min.

Joy-rides:—With Mr. Cantrill—Miss Boyes, 20 min.; Miss Scholfield, Miss Davenport, Mr. Barker and Mr. Hallmark, 10 min. each. With Mr. Scholes—Marshall, 15 min.; Miss Bond, Miss Kinnaird, Mr. Dex and Mr. Vaughan, 10 min. each. With Mr. Costa—Miss Roger, 30 min.; Messrs. Caldecott and Della, 25 min. each; Mr. Ryder, 20 min. With Mr. Goodfellow—Mr. Leeming, 1 hr. 15 min.; Miss Lightfoot, 15 min. With Mr. Lacayo—Mr. Caldecott, 20 min.; Miss Eugene, 15 min. With Mr. Brown—Messrs. Caldecott, 35 min.; Dobson, 15 min. With Mr. Leeming—Mr. Bower, 20 min. With Mr. Michelson—Mr. Hardy, 10 min.

Weather conditions and engines have continued to be troublesome, but both have been circumvented to some extent.

We have had a number of visitors flying round the Air League course this week. Messrs. MacDonough and Brighton, of the Midland Club, called in on Thursday and again on Friday, having crossed the Pennines through some fairly sticky weather on the second occasion. Lady Bailey and Mr. Will Hay, of the London (and Lancashire in Mr. Hay's case) Club, called in on Sunday, as also did the Bishop of Willochra, who had been flown down from Stag Lane by Mr. Goodfellow.

The new "Avian," which is being presented by Avros in place of the "Gosport," was on the aerodrome at the week-end, its graceful lines giving rise to much favourable comment.

Mr. Caldecott, the chief marshal of the flying pageant, has been working tremendously hard on his job, and one believes that Saturday's show will be the best organised that the club has held. Despite his feverish activities, Mr. Caldecott has still managed to get in nearly three hours' flying with four or five different pilots during the week.

MIDLAND AERO CLUB LIMITED

REPORT for week ending July 9.—The total flying time was 20 hrs. 57 mins. The following members were given dual instruction by Mr. W. J. McDonough:—R. Cazalet, Capt. J. E. Brewin, R. D. Bednell, N. Crane, J. Edwards, L. Lee, O. L. Richards.
Solo:—E. J. Brighton, H. J. Willis, R. L. Jackson, W. Swann, C. Fellows, S. H. Smith.
Passenger flights:—C. H. James, L. V. Mann, J. E. Hicks, E. J. Brighton, G. E. Lamb.
Lady Bailey landed at the aerodrome on Sunday in her "Moth" for petrol.

NEWCASTLE-UPON-TYNE AERO CLUB

FLYING report for week ending July 10.—Total, 36 hrs. Dual, 12 hrs. 40 mins.; solo, 19 hrs. 20 mins.; "A" pilots, 4 hrs. Only one machine on service, G-EBLX. No flying Monday or Thursday owing to bad weather.

The following members flew under instruction with Mr. Parkinson:—Mrs. Heslop, Messrs. Elmes, Maxwell, P. L. Lawson, Jewett, Wilson, C. E. Shaw, McDougall, Pargeter, Gibson, Robertson, Thirlwell, de Pledge, Wardill, Heaton, Fairless, Davey, Irving, J. Bell, and A. Bell.

Solo training:—Mrs. Heslop, Messrs. Elmes, Turnbull, Pargeter, Wardill, Bainbridge, and Jewett.

"A" pilots:—Miss Leathart, with Mr. Elmes as passenger; Mr. R. N. Thompson, with Miss Shepperd, Mr. Turnbull, and Mr. Elmes; Mr. C. Thompson, with Mrs. Heslop and Mr. Bulmer; Mr. Mathews, with Mr. Percy; Mr. H. Ellis, with Miss C. Ellis and Miss E. Dunford; Mr. A. Bell, with Mr. J. Bell; Mr. M. Irving flew with Mr. Parkinson.

Messrs. Turnbull, Bainbridge, and Elmes successfully carried out the tests for their "A" licences on Friday and Saturday, and Mr. Pargeter was "launched" on Sunday, putting up a very excellent show.

NORFOLK & NORWICH AERO CLUB

REPORT for week ending July 10.—Great strides have been made during the past week, many new members having started on courses of instruction,

among which the foremost are the club's first lady pupils, viz., Misses L. M. and P. V. Spurrell, who did exceptionally well and shows great promise.

On Sunday evening last, the club also made a further forward movement, and Mr. Ralph H. Moore, of Great Yarmouth, is to be congratulated on having put up an exceptionally fine exhibition as the club's first solo member, and those concerned hope that this is but a forerunner of many suchlike exhibitions which will be seen in the near future.

One of the jokes at present running round the club is that one member has already been dubbed with the sobriquet of "Flat Turn Tommy," much to the amusement of those in the know.

Total hours flying for the week, 14 hrs. 20 mins.

Dual with Mr. Lines: Miss L. M. Spurrell, Miss P. V. Spurrell, Capt. B. W. Ramsay, Mr. H. Mack, Mr. N. Lindley, Mr. R. Harmar, Mr. R. Marshall, Mr. J. C. Cooper, Mr. E. Scott, Mr. J. More, Mr. S. Gough, Mr. R. Moore, Mr. L. Neave, Mr. T. Whitlock, Mr. A. Cooper, Mr. F. Potter.

Solo: Mr. R. H. Moore, Sqdn.-Ldr. C. A. Rea.

Joy rides: Mr. G. Crosskill.

YORKSHIRE AEROPLANE CLUB

REPORT for week ending July 9.—Total hours flown, 31. Dual with Mr. Beck, 15 hrs. 50 mins.; solo, 10 hrs. 30 mins.; cross-country flights, 4 hrs. 35 mins.; tests, 5 mins.

The following members took dual instruction:—Gen. Atcherley, Capt. Milburn, Miss Watson, Messrs. Brackenbury, Crouther, Henry Leatham, Harold Leatham, Birch, Watson, Williams, Ellison, Wall, Bailey.

The following members flew solo:—Capt. Milburn, Mann, Lax, Wilson, Fielden, Brackenbury, Wood, Dawson, Henry Leatham, Birch, Watson, Atcherley, Clapham, Coles, Wayman.

Mr. Brackenbury, who joined the club on June 7, made his first solo flight on July 3, after eight hours' instruction. In the short space of a month Mr. Brackenbury has become an accomplished pilot, which reflects great credit on Mr. G. R. Beck, our instructor.

During the week Mr. W. Armstrong landed in a Vickers "Vulcan" six-seater on his way from Torquay to Middlesbrough, and after replenishing his petrol tanks he proceeded on his way.

Mr. E. B. Fielden took G-EBNN over to Skipton on Saturday with Miss Wilson, one of our lady members, as passenger, and gave an excellent exhibition of aerobatics, to the hospital gala.

DENNIS ROOKE'S FLIGHT TO AUSTRALIA

MR. DENNIS ROOKE, who left Croydon on May 24 in a D.H. "Moth" en route for Australia, met with misfortune at Karachi, and has had to abandon the flight.

Mr. Dennis Rooke reached Karachi on the evening of June 20 and narrowly escaped hurt. He landed in a cricket field measuring 40 yards by 60 yards, which is surrounded by banks and a deep moat. On his first attempt to land his wheels touched the ground almost in the centre of the field, but finding that he could not pull up he took off again and cleared the boundary bank by inches. He circled and again attempted to land, and this time his wheels touched the ground near the extreme edge of the field, but the fairway was too short and his tail-skid hit the bank on the opposite side of the field and was smashed. Mr. Rooke was extremely fortunate in escaping without injury. Although flares had been lit on the Royal Air Force landing ground, he was unable to pick these up, and it appears that he mistook the brilliantly-

lighted bungalows of the Signal Corps for those of the Aircraft Depot.

A detailed examination of the machine showed that the four longerons were broken. It was hoped to fit the undamaged tail of Mr. Stack's machine, but these repairs would have taken at least 10 days, by which time the monsoon on the East Coast, and in Burma would make light aeroplane flying almost impossible. He therefore has abandoned his attempt to reach Australia. Had there been no delay at Karachi or at Aboukir, where he was detained with engine trouble, the last stage of the flight would have been extremely hazardous, and in particular the stretch from the Dutch East Indies to Australia across 450 miles of sea. Mr. Rooke was favoured with following winds when flying down the Persian Gulf, and it was unfortunate that customs formalities delayed him for some seven hours, which was the cause for his arrival in Karachi in the twilight.

Low Flying over the Moors

In a letter from Sir Sefton Brancker to the Chairman of the Yorkshire Aeroplane Club it states, "I have received a complaint regarding aircraft flying low over grouse moors and so disturbing the birds in the middle of the hatching season. The birds were seen to fly away, and the owner fears that they may never return to their nests. I would be very grateful if you would kindly acquaint your members that it is very bad policy to get aviation disliked in this way, and ask them when flying over moorland to fly sufficiently high not to disturb the game."

A Yorkshire Club-House—A Good Idea

WE have already referred to the social aspirations of the Yorkshire Club. It is their directors' ambition to provide the Club with the best Club House in Yorkshire, and for this purpose they have opened a fund which the President has headed with a donation of £100. It is thought advisable that for the benefit of members starting on long-distance flights very early in the morning or returning very late at night, sleeping accommodation should also be provided. For the weary periods when bad weather prevents flying there will be indoor amusement, and two tennis courts and a racquets court for outdoor recreation. All members are asked to co-operate with their directors in the pursuit of these plans so that the necessary money may be obtained as quickly as possible. Mr. D. D. Little and Mr. Hayes are responsible for the fund and a separate account has been opened with the National Provincial Bank, Ltd., 2 Park Row, Leeds. All donations should be sent to the Yorkshire Aeroplane Club, Ltd. (Club House Fund), c/o the bank. The following subscriptions have also been received. Mr. Robert Blackburn, chief director of the Blackburn Aeroplane Co., £42; Mrs. Robert

Blackburn, £10 10s.; The Ragsone Oil Co., Ltd., £10 10s.; Mr. H. Hey, £10 10s.; Mr. W. L. Oldroyd, £10 10s.; Captain Norman Blackburn, who is in charge of the Blackburn R.A.F. Reserve School, Brough, £5 5s.; Mr. Chamberlain, £5 5s.; Sir Sefton Brancker, £10 10s.; Lady Bailey, £1 1s.; Mr. D. D. Little, £2 2s.; Mr. J. F. Barnes, £2 2s.; Total, £210 5s.

A New "Moth" Tour

SIR JOHN RHODES recently completed a very interesting tour of the Continent in his "Moth," and he has done a service to Private Flying by keeping a very detailed record of his running expenses, which reveal a surprising low rate per mile. He started from Croydon on June 3, flew to the south of France, returned through Paris, then branched off to Brussels before reaching Croydon again. Over 1,500 miles were covered in 23½ flying hours, extending over a period of 22 days. In a subsequent issue of FLIGHT we hope to describe this useful tour in detail.

Lady Bailey Flies 18,000 ft.

On July 5 The Hon. Lady Bailey, accompanied by Mrs. Geoffreyde Havilland, ascended in her D.H. "Moth" at Stag Lane aerodrome and accomplished a splendid altitude flight. After first passing through a layer of storm clouds, they reached an altitude of 18,000 ft., thus beating Mrs. Elliott Lynn's recent flight, on an "Avian," of 16,000 ft. Subject to official ratification, Lady Bailey has therefore established a new record for the light aeroplane class.

Kenneth Hunter Crashes

MR. KENNETH HUNTER had the misfortune to crash his S.E.5A biplane at Brooklands on July 10. The machine was wrecked, but he escaped with minor injuries.

AIRISMS FROM THE FOUR WINDS

R.A.F. Cairo-Cape Flight an Annual?

It is reported that the Service Flight of R.A.F. machines from Cairo to Cape Town and back, which has already been successfully carried out on two occasions, is to become an annual service event, in which the South African Air Force will co-operate.

Medical Air Patrol in Australia

A proposal has been made for the patrolling, by means of aircraft, by a doctor of a large area in the interior of Queensland, in the neighbourhood of Longreach, Camooweal and the Queensland border. The aeroplane has already been put to good use regarding the sick in Australia and other countries, and this new venture will be watched with interest.

A Brussels-Kinshasa Non-Stop Attempt

It has been proposed to attempt a non-stop flight from Brussels to Kinshasa, in Belgian Congo, next August, the pilots being Lieutenants Medaeto and Verhaegen, who flew from Brussels to Leopoldville and back last year.

Gen. Balbo Returns

GEN. BALBO, Italian Under-Secretary of State for Air, who has been on a visit to this country, left Croydon in his Fiat machine on July 6, and reached Rome on July 10, when he was received by Sig. Mussolini.

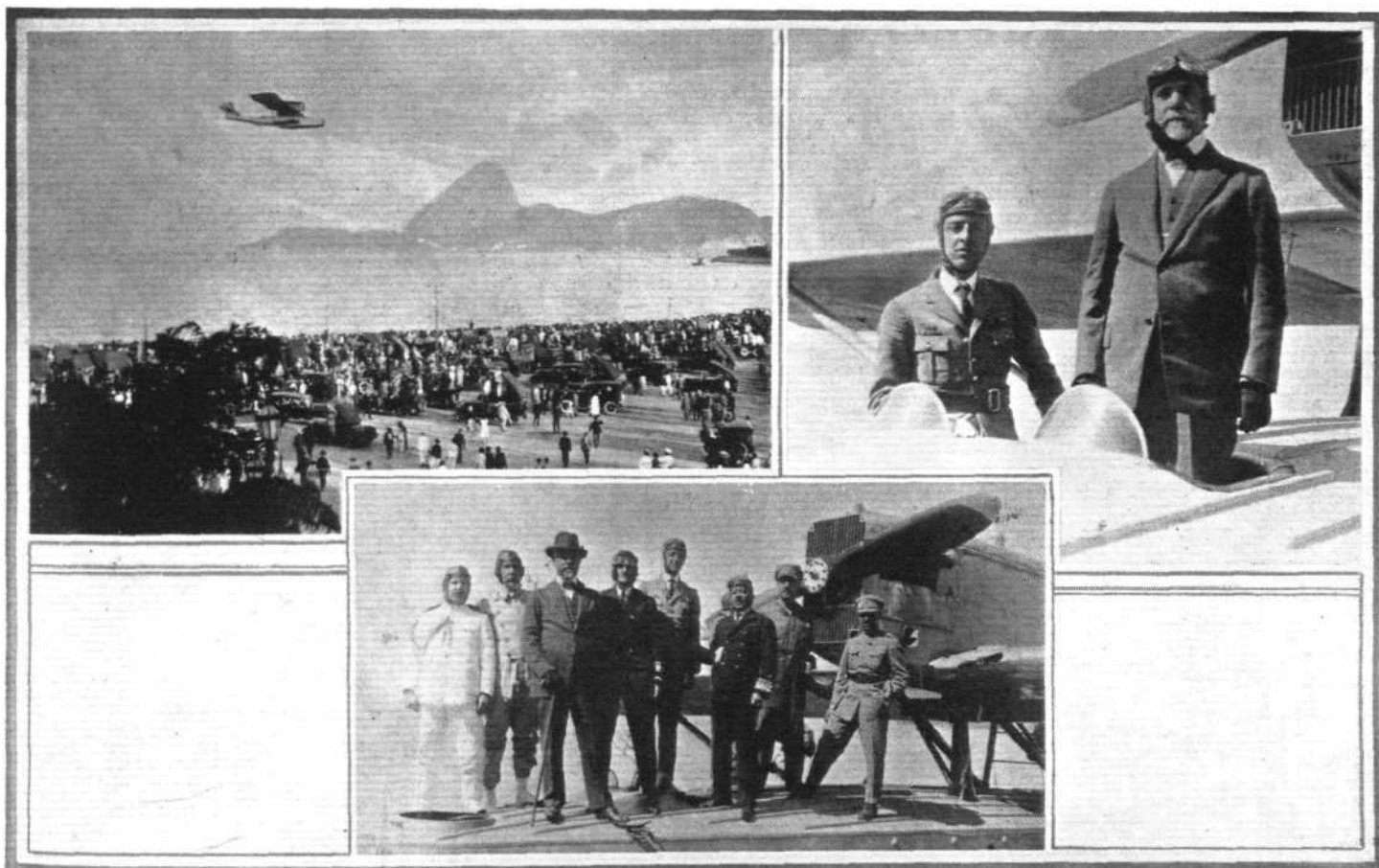
De Beires' World Flight

WITH various pilots darting across the Atlantic, the Pacific, to India, to the East Indies, etc., it has been somewhat difficult of late to keep count of certain other long-distance flights that have been in progress the meanwhile.

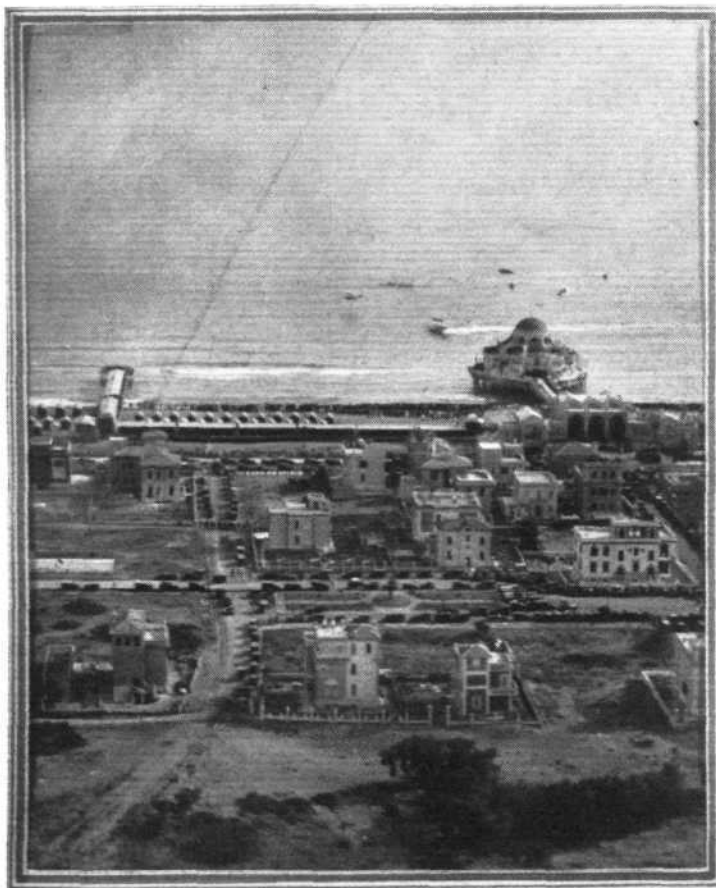
One such case is the world flight of the Portuguese pilot, Sarmiento de Beires, about whom, we are afraid, nothing has been published in *FLIGHT* for some time. Maj. de Beires, it will be remembered, set out from Lisbon on March 3 in a Dornier Wal flying boat (450 h.p. Lorraine Dietrich), accompanied by Comm. Cabrai, officer-mechanic Goaveya, and navigator Contero. They reached Bolama on March 6, and made the Atlantic crossing to Fernando Noronha on March 16-17, later proceeding to Pernambuco and Rio de Janeiro in Brazil. It was at first intended that the airmen should fly back, but matters of finance prevented this. Instead, they proceeded to fly to North America, and got as far as Para, when, early last month, they made a forced descent in the sea when flying to Georgetown (British Guiana). They were rescued by a fishing vessel, which attempted to tow the machine into port, but without success, for the seaplane sank and was lost.

Southamptons for Australis

Two Supermarine "Southampton" flying-boats have been ordered for the R.A.A.F. and are to be delivered about the middle of September. As two machines could not be completed in time if started now, the British Air Ministry very kindly agreed to transfer to the Australian Government two boats now under construction for our own service, and to wait the necessary time for replacements to be built. In this manner Australia will be able to take delivery much earlier. It seems likely that the two "Southamptons" will be heard of again in connection with the proposed English flying-boat flight to Australia.



AN UNLUCKY PORTUGUESE FLIGHT: Maj. Sarmiento de Beires left Lisbon on March 3, in a Dornier Wal flying boat, "Argus," intending to make a flight across the Atlantic and back. He succeeded in crossing from Bolama to Brazil, but last month the seaplane was lost whilst flying from Para to Georgetown (B.G.). Our pictures show (top, left) the "Argus" arriving at Rio de Janeiro (note Sugar Loaf Mt.), and Dr. Washington Luiz, the Brazilian President, and Maj. de Beires (right) when the President and party (bottom) were taken for a joy-ride.



PINEDO ARRIVES HOME : A snapshot, taken from one of the escorting seaplanes, of the Marchesse de Pinedo landing in the "Santa Maria II" at Ostia, near Rome, on June 16, at the conclusion of his wonderful flight, Italy-America-Italy.

German Air Woman Flies to England

FRAULEIN RASCHE, the German airwoman who is planning an Atlantic flight, arrived by air in England on July 9, from Le Bourget, whence she had previously flown from Hamburg via Essen and Brussels. She was flying a Udet biplane (100 h.p. Siemens), accompanied by her mechanic, Hans Joachim, and landed at Croydon in the evening. On July 12 Fraulein Rasche flew from Croydon to Hamble, Southampton, flying in company with Mrs. Elliott Lynn, who piloted another machine. Shortly after leaving Croydon

they encountered a heavy thunderstorm, but flew through it and reached Southampton safely. Fraulein Rasche dismantled her machine and had it stowed on the "Leviathan" in which she is sailing to America, in company with Comdr. Byrd and Mr. Chamberlin. In America she will give flying demonstrations on her Udet machine and make arrangements for her Atlantic attempt.

The South Pole Next

HAVING accomplished his Atlantic flight, Commander Byrd's next effort is to be a visit to the South Polar regions. He is planning to lead an expedition of some 40 strong next autumn. The expedition will include several scientists, and will be equipped with two aeroplanes (float and/or ski) and the usual polar gear. The start will be made from the Ross Sea barrier, by way of New Zealand.

Hudson Bay Air Expedition

ALL is now ready for the Hudson Bay air expedition, which is to look into the question of establishing a port on the bay for a commercial transatlantic route. Six Fokker monoplanes are being employed, which will operate from three air bases—at Nottingham Is., Big Is., and Port Burwell. It is expected that the operations will last 18 months.

Fine Light 'Plane Flight

LITTLE attention has been given in this country to a really fine flight made in France on a light 'plane. According to our excellent contemporary *Les Ailes*, the French pilot Magnard left Orly on June 29 at 10.15 a.m. on an Albert monoplane with 40 h.p. Salmson engine with the object of establishing a light 'plane record. Strong head winds prevented him from carrying out his original purpose, and he ran out of petrol at Saragossa, where he landed in the dark with engine stopped, having been in the air for 11 hrs. 30 mins. For the flight the machine carried 128 litres (28 galls.) of petrol and 7 litres (0.54 galls.) of oil, bringing the total loaded weight up to 480 kg. (1,057 lbs.).

Argentine Air Mission in England

SIR SAMUEL HOARE welcomed the Argentine Air Mission, visiting England, at Claridge's Hotel on July 7. He said he hoped that the next mission would arrive in this country by way of the air.

Dutch Pilot Obtains British Navigator's Certificate

THE Dutch Air Ministry having made no arrangements up to now whereby pilots and others may sit for their navigation tickets, Mr. Aler, assistant aerodrome manager of the K.L.M. at Rotterdam, recently came to England and successfully passed the Air Ministry Examination as second-class navigator. Mr. Aler was naturally handicapped by the language difficulty, although he speaks and writes English fluently enough, and he was also unable to take advantage of the special course of lectures which made so many heads spin at Croydon. Mr. Aler is thus the first Dutch pilot and probably the first foreign pilot to hold a British second-class navigator's certificate.



A VERY FINE COMMERCIAL AEROPLANE : This Fokker F. VIII, fitted with two Bristol "Jupiter" Series VI engines, has one of the most comfortable cabins ever provided in a commercial machine.

AN ITALIAN SERVICE FLIGHT ACROSS SEA AND DESERT

GENERAL BALBO, Under-Secretary of State for Air in Italy, made an official tour by air of the Italian Air Force positions in Cirenaica and Tripolitania and also made a service inspection of the Isles of the Aegean Sea. Two machines took part in the flight. One was a Savoia Marchetti S. 55, a type used by the Marquis de Pinedo during his recent famous flight, and the other was a "Marina," from the Italian Aircraft works in Pisa, both machines being fitted with 500 h.p. engines. The General and his suite started before sunrise on April 24, from the airport of Vigna di Valle, on Lake Bracciano near Rome, and in three hours they were flying over Tarent, the Italian naval base, and one of the largest

oasis of Djarabub in 2 hrs. 40 mins., a place where Italian Air Forces are stationed. The return to Tobruk was made the same day. The subsequent stages of this successful tour were as follows: Tobruk-Bengazi, 279½ miles, in 3 hrs. 26 mins. on the 29th; Bengazi-Agedabia, 115 miles, in 1 hr. 20 mins. on the outward journey, and 1 hr. 40 mins. on the return journey, both carried out on the 30th; Bengazi-Tripolis, 466 miles, in 5 hrs. on May 2; Tripolis-Ghadames, 341½ miles, in 5 hrs. on May 5; and the return flight in 5 hrs., too, on the next day.

Finally, on May 7, the General flew from Tripolis to Vigna di Valle, a sea crossing of 683½ miles, in 6 hours. This worked



AN ITALIAN SERVICE FLIGHT: Three incidents during General Balbo's (Italian Under-Secretary for Air) air tour of the stations on the Aegean Sea, and in Cirenaica and Tripolitania. On the right, General Balbo being received at Rhodes, and, on the left, an aerial view of Derna. Above, inspecting an Escadrille of Capronis and Ansaldo's at Berka (Bengazi).

harbours in the Mediterranean. After a continuous flight of 9 hrs. 40 mins. they arrived at Leros, one of the twelve Aegean Islands occupied by Italy since 1911.

This initial stage was the longest non-stop run of the whole tour. The next morning, April 25, another hour's flight brought them to Rhodes, the Isle of the old Knights. The picturesque types of inhabitants there gave a most cordial welcome to General Balbo and his suite. On the 27th Tobruk in Cirenaica, a distance of 404 miles, was reached after four hours' flying. Before the end of the current year the magnificent gulf of Tobruk, which may afford an excellent naval base and air base, will probably be connected with the metropolis by a regular air line, having Cairo as a terminus. On the 28th a flight of 248½ miles from Tobruk carried them to the

out at a speed of 113.9 m.p.h., and was a splendid conclusion to the tour. The engines gave no trouble whatever at any time, and nothing marred the perfect regularity of the different stages, although some of them extended over vast barren stretches of wilderness as well as the sea. By the ordinary means of transport, the railway, steamer and camel, this tour would have taken at least two months, travelling very fast. By air it took just under 14 days, with about 50 hours of flight.

The total distance covered in flight was approximately 4,350 miles. It was a tour undertaken as an ordinary service flight, but, in the opinion of Signor Mussolini, the Italian Premier, it was one of the finest Italian flights during the last few years.

Mittelholzer "Flies the Matterhorn"

LIEUT. MITTELHOLZER, the Swiss pilot who recently flew from Zurich to the Cape, has just flown round the summit of the Matterhorn in an aeroplane carrying 10 passengers.

American Long-Distance Air Contests

Two long-distance air races are being planned in America, one between San Francisco and Spokane, and the other between New York and Spokane.

A New U.S. Seaplane Record?

ON JULY 4 Lieut. C. Champion, U.S. Navy, attained an altitude of 37,995 ft. in a seaplane, at Washington. This well exceeds Lieut. Demougeot's (France) height record of 30,479 ft.

Another Round Australia Flight

MR. KEITH ANDERSON, who left Sydney on June 25 in a Bristol biplane for a flight round Australia, successfully completed his attempt on July 8.

Who Has IT?

THE Editor of FLIGHT received, on July 6, the following cablegram from Rem. 5 Toronto, Ont. 35: "Can you locate following machine three-engined air seaplane extreme endurance forty-five hours at hundred miles hour crew five delivery Canada middle August purpose world flight cable reply. L. Cummings." We had the very thing in our duck pond, but somebody pinched it the other night. Perhaps some British aircraft firm will come forward with a substitute.

'Plane Struck by Lightning

A REPORT comes from Manitoba, Canada, which states that three airmen met their death under extraordinary circumstances. They—Flying Officer W. C. Weaver and Messrs. A. T. Hardley and F. H. Wrong—were carrying out photographic survey work over Lake Manitoba, when their machine was apparently struck by lightning. It was out of sight at the time, in the clouds, when the three bodies were seen falling to the ground, followed by the debris of the machine.



[“FLIGHT” Photographs]

DE HAVILLAND SPORTS: Some snaps from a highly successful meeting. 1, the sack race. 2, F. Mott winning final of 220 yards (closed). 3, Finish of final of 100 yards closed race. 4, Final of the tug-of-war. 5, the inter-departmental “boat race.” 6, Race for employees’ children under 14. 7, the portrait studio, which bore the admonition “Have a caricature or portrait of yourself by the infamous motheaten D.H. artist.” 8, Miss O. Smith in Ladies’ high jump. 9, Giving 2s. 6d. joy rides on a “Moth”

THE DE HAVILLAND SPORTS MEETING

Held at Stag Lane This Year

This year's meeting of the de Havilland Sports Club was held at the Stag Lane Aerodrome on Saturday last, July 9. As usual a most interesting programme had been arranged, and thanks to the excellent organisation the events were run off to time with great promptness. The De Havilland Challenge Cup, awarded to the department gaining the highest number of points at the meeting, was won this year by the Office Staff, with the Engine Shop as runners up. Last year the latter were the winners.

Several new items had been added to the programme at this year's meeting, the most popular of which was, perhaps,

A good entry again characterised the 220 yards open, heat 1 of which was won by B. G. Skingle, heat 2 by J. Bicknell, and the final by A. W. Hyde, who was placed second in heat 1. In the 440 yards closed, first place was secured by R. O. Ball.

The obstacle flying race proved very amusing. In this competitors had to start from a given line, run 50 yards, put on their "Sidcot" suits, and were then transported in wheelbarrows to donkeys awaiting them. On these they reached—as the programme had it, "with luck,"—their "Moths" on which they had to fly around the 3-miles' course and cross the finishing line. The three competitors entered for this event



[“FLIGHT” Photographs]

AT THE DE HAVILLAND SPORTS : On the left a group of de Havillanders watching the fun, including from left to right, Mr. Broad, Mr. St. Barbe, Mr. Hearle, Mr. Walker, Mr. Butler, Major Halford and Captain de Havilland. The picture on the right shows Mrs. Geoffrey de Havilland presenting the prizes.

the joy-rides at 2s. 6d. on D.H. "Moths," Messrs. Sparks, St. Barbe, White, Dickinson and Barnard giving their services free. In addition the exhibition flights were most excellent, and on one occasion Mr. Barnard did some extraordinarily low rolls, and at least one spin which terminated—well at any rate while the machine was still in the air, but only just.

It is not, unfortunately, possible to give a very detailed account of what was undoubtedly a most interesting meeting, but below we set out the winners in the various events.

In the 100 yards closed, heat 1 was won by G. R. Sanders, heat 2 by W. L. Allardyce, heat 3 by F. W. Amos, heat 4 by G. E. Benn, and the final by W. L. Allardyce. R. Hardingham won event 2, throwing the cricket ball, with a distance of 75 yards 8 inches. The 100 yards closed, for competitors under 17, was won by A. Stone, while in the high jump Allardyce again scored a victory with an "altitude" of 5 ft.

In the 100 yards open, heat 1 was won by H. F. Hayes, heat 2 by A. W. Hyde, heat 3 by J. Bicknell, heat 4 by B. G. Skingle, and the final by Bicknell. The 100 yards (ladies) closed was won by Miss W. M. Cox.

In the tug-of-war final (the rounds had been previously decided) the Aerodrome and Development department scored a victory against the Panel Shop.

The 220 yards closed had drawn a great number of entries, and heat 1 was won by Allardyce, heat 2 by G. E. Benn, and the final by F. Mott. The ladies high jump was won by Miss M. Benn.

were: W. T. Ballantyne, J. P. Rae, and H. Buckingham, all Officers of the R.A.F. Reserve, trained at the de Havilland school.

F. W. Amos, was again first in the long jump, his "hop" being one of 19 ft. 2 in., which is better than we used to be able to do on the old Bleriot "Penguin." In the veterans' 100 yards race E. Marriott was first, with R. Luker second.

No less than 26 competitors started in the 880 yards open, which was won by C. H. D. Ucal in 1 min. 58½ sec. (16 m.p.h.!).

The inter-departmental one mile relay race included 880 yards, 220 yards, 440 yards, and 220 yards, and was won by the Engine Shop, with the Office Staff second.

The one mile open handicap race was won by L. W. Puddeshatt of the Watford Harriers in 4 mins. 26 sec., or at a speed of 13.45 m.p.h. We understand that this gentleman is now being fitted with a supercharger.

The last race of the meeting was a one mile closed handicap, which was won by R. H. Pitt in 5 mins. 24½ secs.

At the end of the racing, the prizes were distributed by Mrs. de Havilland, and everyone was very glad that this year illness at home did not prevent her from carrying out her graceful task, as was unfortunately the case last year.

In the evening there was an ankle competition, but as FLIGHT's photographer is somewhat shy, we regret that we have no photographs of this interesting event. His excuse that he could not get near the pavilion for the crowds should not be taken too seriously.

Batavia-Amsterdam Flight

MR. VAN LEAR BLACK, who completed his air trip from Amsterdam to Batavia on June 30, started on the return flight on July 6. His Fokker monoplane is piloted by M. Geysendorffer.

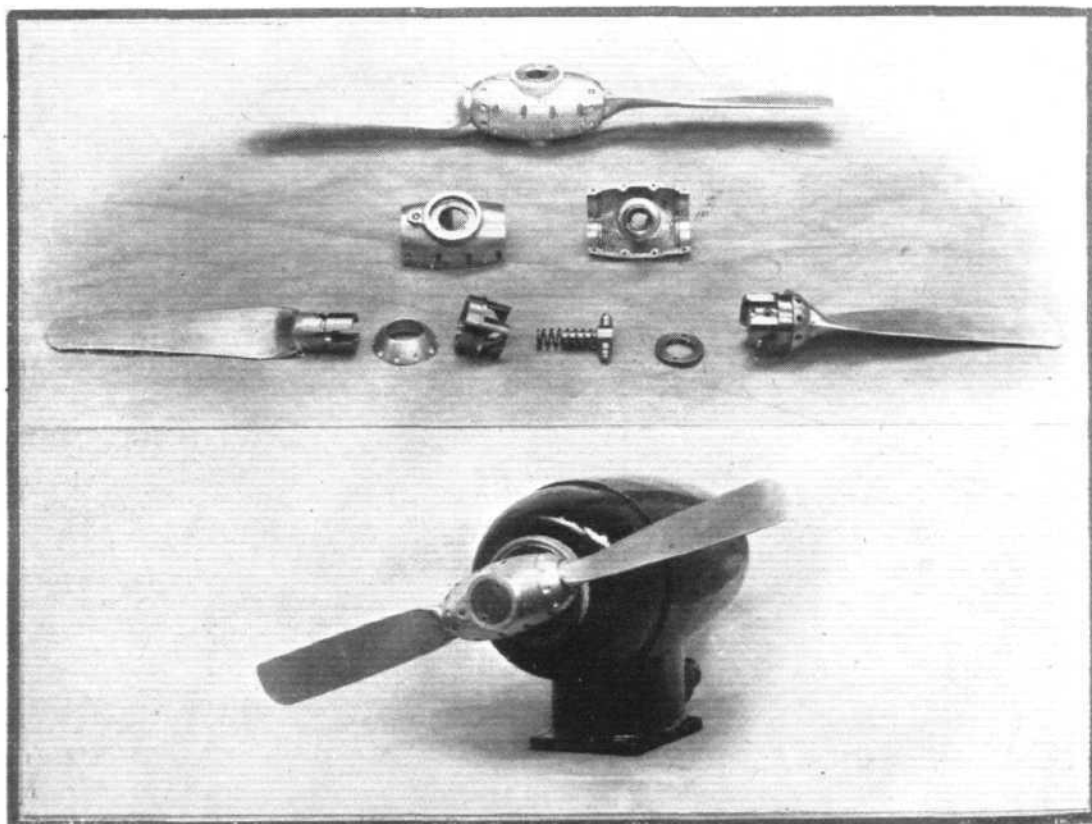
80 French M.P.'s over Paris

LED by Gen. Girod, some 80 members of the French Senate and Chamber of Deputies made flights over Paris on July 6.

A New Electric Power Generator for Aircraft

Second only in importance to reliability of plane structure and engine is the question of navigation, and this may be roughly divided under headings (1) Dead reckoning by the aid of compass only; (2) dead reckoning by compass checked by a series of solar or stellar observations; (3) wireless transmission and direction-finding equipment.

It will be noted that the windmill is extremely compact and consists of a small elliptical hub completely enclosing the governor and actuating mechanism, and to which the blades



(1) The early practice of mounting the generator, with its windmill, so that it could be twisted relative to the air-stream by means of a lever from the cockpit by the operator.

The most effective values of spring and weight, and the correct amount of damping have been determined by prolonged experiments, so that a condition of automatic balance is maintained with complete absence of "hunting" and vibration. The hub is watertight and waterproof, it is made of sea-resisting aluminium alloy, and is easily attachable to the generator shaft. The amount of overhang, it should be noted, is extremely small. The overall dimensions

are 20 ins. across the blades. The weight complete is only 2 lbs. 1 oz., and the present model is suitable for generators of capacity up to 500 watts. The normal speed is 3,500 r.p.m., and the windmill will maintain this within very small limits in wind speeds of 70 to 170 m.p.h. Furthermore, these windmills are produced to close manufacturing limits, ensuring interchangeability of parts, and these parts are subjected to exacting tests at all stages of manufacture.

In order that these windmills may be subjected to exacting and rigorous tests throughout a large range of wind speed, the development of much expensive test equipment was incidental. This consists mainly of a wind tunnel of Venturi form, the neck diameter being 3 ft., the wind being produced by an exhaust fan having blade tips so arranged as to have a radial inflow and outflow, the dimensions being 6 ft. diameter by 18 in. wide, driven by a 165-h.p. variable-speed motor,

having a maximum speed of 750 r.p.m. This plant has been installed at Messrs. Newton Bros' works at Derby.

Every windmill is tested, as stated above, throughout a large range of wind speed with and without load, full observations being made of the "drag" exercised (*i.e.*, the actual effort exerted by the plane to drive the generator and windmills through the air), exact speeds being measured by means of a stroboscope directly connected to a tachometer placed some distance from the mouth of the wind tunnel.

In addition to these tests, an overspeed of not less than 100 per cent. is applied for several minutes in order to ensure that no undetected weakness exists in the various component parts of the windmill. It is understood that the sales of these windmills is in the hands of Marconi's Wireless Telegraph Company, for whose requirements it has been developed. Full particulars may be obtained from that company.



GEN. BALBO'S VISIT

ON July 5, General Balbo foregathered at the Savoy, upon the joint invitation of the Royal Aero Club, the Royal Aeronautical Society, the Society of British Aircraft Constructors and the Air League of the British Empire, the Duke of Sutherland presiding. The Chairman said that General Balbo was to be honoured, not only as the Italian Under-Secretary of State for Air, but as a practical pilot. Italy and England, he said, would stand side by side for the good of the world and civilization, in which the air would play a great part.

General Balbo, speaking in Italian, rendered into English by General Guidoni, the Italian Air Attaché, gave a few brief impressions of his visit to England. Hendon, he said, was the most unique experience in the world of looping, formation and other wonderful flying. Also particularly was he impressed by the wonderful finish of the machines, which were real works of art, whilst at every turn was indicated the most serious work from the practical side of flying. Especially impressive were the night bombers, and the D.H. "Moth" machines were subjects of his greatest admiration. Although he had not seen the plans of the Hawker "Horsley," it was an amazing machine, which could be landed without a hitch with its huge load of petrol. After his experience with the Napier engine he had not quite the same confidence that he had before of Italy being able to hold the Schneider Trophy. In regard to that event, he promised that all visitors to Italy upon that occasion would receive a very cordial welcome to join in celebrating the victory of whichever country might succeed in gaining the Cup. Finally, referring to civil aviation, it was, he said, a grand means to unite the entire British Empire.

Mr. T. O. M. Sopwith, on behalf of the British aircraft industry, thanked General Balbo for his sympathetic survey

of their efforts. It was remarkable that although General Balbo had been here only a week, he had summed up from observation, aviation in this country, as it existed today in a way he had never before experienced. If Italy, he continued, were not fortunate enough to hold the Cup, which they so gallantly won from the U.S. last year, he hoped England would succeed, so that the General could return to England again to take part in endeavouring to recover for Italy the coveted trophy.

Mr. Handley Page closed up the toast list with a highly humorous speech, in thanking the Duke of Sutherland for presiding at the dinner.

In addition to the guest of the evening, there were present:—Gen. Verduzio, Count Rogero, Gen. A. Guidoni, Comm. Pellegrini, Air Vice-Marshal Sir S. Brancker, Air Vice-Marshal Sir J. Higgins, Col. The Master of Sempill, Air Vice-Marshal Scarlett, Gen. P. R. Groves, Lieut.-Col. N. G. Thwaites, Lieut.-Col. W. A. Bristow, Lieut.-Col. Sir F. K. McClean, Maj. J. S. Buchanan, Wing-Comm. Williamson, Comm. J. Bird, Capt. P. D. Ackland, Flt.-Lieut. Williams, Messrs. T. O. M. Sopwith, H. T. Vane, F. Handley Page, H. O. Short, A. H. R. Fedden, P. S. Foster, C. V. Allen, S. Spooner, C. G. Colebrook, and Comm. H. E. Perrin.

Gen. Balbo, it may be added, has already "done" most of the aeronautical sights in this country during his brief stay. He has, of course, seen the R.A.F. Display and has visited the R.A.F. Cadet College at Cranwell, the Aircraft Apprentices' Training Centre at Halton, inspected the Napier Engine Co.'s works at Acton, the Fairey aircraft works at Hayes, the Handley Page works at Cricklewood, and the Supermarine works at Southampton. He has also visited Stag Lane Aerodrome, and personally tried the D.H. "Moth" aeroplane!

General Balbo at Southampton: The Italian Under-Secretary for Air, Gen. Italo Balbo, during his visit to this country, inspected the Supermarine Aviation Works at Southampton. Our picture shows the Italian Mission and others taken on that occasion. Reading from left to right—Mr. A. E. Hunn (Air Ministry), Lieut. E. Guerra, Lieut.-Col. A. Pellegrini, Gen. R. Verduzio, Gen. A. Guidoni, Gen. Balbo, Senator Marconi, and Comdr. J. Bird. The party afterwards adjourned on board Senator Marconi's yacht "Elettra," moored in Southampton Water.



THE ROYAL AIR FORCE

London Gazette, July 5, 1927.

General Duties Branch

Pilot Officer J. F. Griffiths is granted a permanent commn. in this rank with effect from June 3, and with seniority of Dec. 3, 1925, on completion of probationary service. Pilot Officer W. H. O. Rumbit is granted a permanent commn. as Flying Officer with effect from, and with seniority of, Sept. 14, 1925. (Substituted for Gazette Oct. 27, 1925.)

The following Pilot Officers are promoted to rank of Flying Officer:—P. G. S. Gardiner (April 12), F. B. G. Walker (April 12), L. G. Gray (May 28), J. G. Parkin (May 28), L. C. Phillips (May 28).

Flight-Lieut. G. M. F. O'Brien, D.S.C., is placed on half pay, Scale B, from July 14 to Aug. 31 inclusive.

The following officers are transferred to the Reserve:—Class A—Flying Officer W. W. Bradford (June 28), Flying Officer H. S. R. Burt (July 12). Class C—Flight-Lieut. E. P. Hardman, D.F.C. (July 7), Flying Officer J. C. Jeffrey, M.C. (July 1).

Pilot Officer A. W. L. C. Allen resigns his short service commn. (June 27).

Stores Branch

Flying Officer E. F. Elliott is placed on retired list on account of ill-health (July 6).

Accountant Branch

Flying Officer S. C. Wyatt is granted a permanent commn. in this rank (July 6).

Chaplain's Branch

The Rev. J. A. Jagoe, M.A., is granted a permanent commn. with the relative rank of Sqdn.-Ldr. (July 6).

Legal Branch

Flight-Lieut. R. W. Stevens resigns his temporary commn. (June 12).

Memoranda

The following Flying Officers relinquish their temporary commns. on ceasing to be employed with the Electrical Services Works Co. (July 1):—W. J. Root, M.I.Mar.E., R. W. Strugnell, E. G. Taylor.

RESERVE OF AIR FORCE OFFICERS

General Duties Branch

The following are granted commns. in Class A.A. as Pilot Officers on probation:—F. A. B. Fawcett, G. V. Kibblewhite, D. A. Naismith, G. J. C. Paul (June 20). R. B. Mitchell is granted a commn. in Special Reserve as a Pilot Officer on probation (July 1). J. R. Wardrop is granted a commn. in Special Reserve as a Pilot Officer on probation (June 2) (substituted for Gazette June 14).

The following are confirmed in rank:—Flying Officer—R. L. Green (July 4). Pilot Officers—T. J. Tingley (June 29); R.E. Hopper, J. F. X. McKenna, E. T. Scott, V. V. W. Vallance (July 5).

AUXILIARY AIR FORCE

Medical Branch

The following to be Flying Officer:—No. 605 County of Warwick (Bombing) Sqdn.—J. S. Jerome, M.C., M.A., B.M. (July 5).

IN PARLIAMENT

Air Mails

COLONEL DAY, on July 5, asked the Postmaster-General the approximate number of letters and parcels that have been forwarded through the General Post Office by air mail for the twelve months ended to the last convenient date?

Sir W. Mitchell-Thomson: The total numbers of letters and parcels posted in this country for air mail transmission during the year ended March 31 last were approximately as follow:

162,000 letters (including about 48,000 for the Cairo-Baghdad Air Mail service).

8,200 parcels.

Passenger Aeroplanes and Forced Landings

COLONEL DAY, on July 6, asked the Secretary of State for Air whether he had received any reports during the previous 12 months of passenger-carrying aeroplanes that have been compelled to make a forced landing in Great Britain owing to lack of petrol; and whether any persons had been injured.

Sir Samuel Hoare: Forced landings are not notifiable to the Air Ministry under Regulation unless they involve death or injury to any person or serious structural damage to the aircraft. The only forced landing during the last 12 months due to lack of petrol and notifiable under the above Regulation was one at Westerham on June 27, 1927, when one passenger was very slightly cut by broken glass. It was a machine flying from Paris to Croydon.

PERSONALS

Married

On July 2, at the Church of Our Lady, Grove Road, St. John's Wood, A. W. H. NELSON, R.A.F., only son of Maj. and Mrs. Nelson, of 1A, Castle-town, West Kensington, was married to RITA, only daughter of the late Staff-Capt. BASIL CHARLES M. MAXWELL-HERON, M.L.O., and Mrs. Maxwell-Heron, of 1, St. Mark's Court, Abercorn Place, only granddaughter of the late Capt. Maxwell-Heron, of Heron, M.P., D.L.

FLIGHT-LIEUT. RICHARD FRANCIS OSBORNE, R.A.F., was married on June 28, at St. Mary's, Blackheath, to SIGRID CONSTANCE, youngest daughter of the late Cav. VICTOR RESSICH, K.C.I., and Mrs. Ressich, 91, Shooter's Hill Road, Blackheath.

LESLIE WOODLAND PARK, R.A.F., youngest son of the late Rev. J. Park, B.A., and Mrs. Park, was married on June 28, at Kensington, to ALICE GERTRUDE, widow of ERIC L. WAINRIGHT, 15th Sikhs, Indian Army.

The marriage arranged between Mr. RICHARD M. THOMAS, R.A.F., of Llanberis House, Moseley, Birmingham, and DOROTHEA WYNDHAM, second daughter of Mr. and Mrs. KNATCHBULL, of the Manor House, Winsley, near Bradford-on-Avon, took place on June 28, at Winsley Parish Church.

AIR MINISTRY NOTICES

Flying on Civil Air Routes in Conditions of Bad Visibility

1. In order to obviate the danger of collision between Royal Air Force aircraft and civil aircraft proceeding to or departing from Croydon in conditions of bad visibility, civil aircraft will not in any circumstances follow the normal Lympe, Edenbridge, Caterham, Croydon route, but should follow one of the following routes when the height of the lowest cloud is less than 1,000 ft. above sea level or the horizontal visibility is less than 1,000 yards, viz.:—

(a) Edenbridge—Merstham—Croydon.

(b) Wrotham Valley—Oxford—Shoreham—Chelmsfield—Croydon.

Where necessary, in addition to routes (a) and (b), aircraft may follow a compass course:—

(c) Lympe—Chelmsfield—Croydon,

but in such case should, if practicable, fly above the fog, or at least as high as possible.

2. When the system as detailed above is put into operation the C.A.T.O. Croydon, will:—

(i) Broadcast by means of R/T on 900 metres a FOG NOTICE to all civil aircraft operating in the vicinity of the ordinary Lympe—Croydon route.

(ii) Inform all aircraft companies operating from Croydon aerodrome with a view to all departing aircraft being warned.

He will also carry out a similar procedure when fog conditions cease to exist.

3. Aircraft en route to or from Croydon will on receipt of this FOG NOTICE immediately resort to one of the three routes mentioned in para. 1. In the event of route (c) (the compass course) being selected, the C.A.T.O. Croydon, must, whenever possible, be informed by R/T.

(No. 53 of 1927.)

W. F. Nicholson.

SIDEWIND

WITH the holiday and carnival season in full swing—not to mention a few special events like the Advertisers' Costume Ball at Olympia, on Friday, July 22—it is useful to know where one can be sure of obtaining—and quickly—fancy costumes. Miss Arthur, Leonard's Road, Claygate, Surrey, always has in stock a great variety of costumes for both sexes, not forgetting children, so that something could be found to suit every occasion and at quite reasonable charges. It is worth while sending for a copy of the list of costumes. Miss Arthur is on the telephone, Esher 428—and so is in a position to deal with urgent orders. She is also able to supply at short notice, costumes to special designs and also to provide all sorts of carnival novelties.

PUBLICATIONS RECEIVED

The Air Pilot Monthly Supplement. No. 33. July, 1927. Air Ministry, Kingsway, London, W.C.2.

L'Année Aéronautique 1926-1927. By L. Hirschauer and Ch. Dollfus. Dunod. 92, Rue Bonaparte, Paris.

Session, 1927-28. Department of Aeronautics, Imperial College of Science and Technology, South Kensington, London, S.W.7.

The Working of Aluminium. By Edgar T. Panton. Chapman and Hall, Ltd., 11, Henrietta Street, Covent Garden, W.C.2. Price 13s. 6d. net.

AERONAUTICAL PATENT SPECIFICATIONS

(Abbreviations: Cyl. = cylinder; i.c. = internal combustion; m. = motor. The numbers in brackets are those under which the Specifications will be printed and abridged, etc.)

Applied for in 1926.

Published July 14, 1927.

- 6,508. T. M. DUTTON. Screw propellers. (272,578.)
11,974. F. KRUCKENBERG and C. STEDEFELD. Radiators. (272,661.)
18,489. J. BOLGIANO. Aircraft. (272,704.)
19,243. R. ESNAULT-PELTERIE. Tents. (271,804.)

Applied for in 1927.

Published July 14, 1927.

221. AIRSHIPS, INC. Collapsible boats. (272,791.)
1,613. H. JUNKERS. Method of and apparatus for navigating aircraft. (264,842.)
2,095. W. RIESELER and W. KREISER. Aircraft with carrying surfaces rotated by the wind in flight. (264,884.)

FLIGHT,

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